

IT IS CLAIMED:

1. A method of distinguishing high quality elements from potentially defective elements in an array of photo-sensitive elements while illuminated with an object field of varying light intensity thereacross, comprising:

calculating difference values between outputs of individual ones of the elements and neighboring elements,

if the difference values for a given one of the individual elements have different signs, identifying the given element to be of high quality, and

if the difference values for the given element have the same signs, identifying the given element to be potentially defective.

2. A method of identifying and correcting defective ones of an array of photo-sensitive pixels, comprising:

directing an object field of varying light intensity across the array,

calculating difference values between outputs of individual ones of the pixels and a plurality of neighboring pixels,

if the difference values for a given one of the pixels have different signs, utilizing the output of the given pixel for data of the object field,

if the difference values for the given pixel have the same sign, determining whether the difference values are in excess of a threshold,

if the difference values are not in excess of the threshold, utilizing the output of the given pixel for data of the object field, and

if the difference values are in excess of the threshold, calculating a value of the given pixel from at least some of the neighboring pixels and utilizing the calculated pixel value in data of the object field.

3. The method of claim 2, wherein said threshold includes either of at least first or second quantities that are different from each other depending upon whether said same sign is positive or negative.

4. The method of claim 2, wherein said threshold includes either of at least first or second quantities that are different from each other depending upon a distance between the given pixel and individual ones of its neighboring pixels.

5. The method of claim 2, wherein a value of said threshold is dependent upon both (a) whether said same sign is positive or negative and (b) a distance between the given pixel and individual ones of its neighboring pixels.